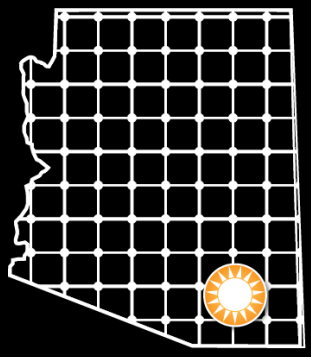


FORT HUACHUCA, ARIZONA SOLAR ENERGY PROJECT

PROVIDES ONSITE ENERGY GENERATION & SUPPLY DIVERSITY

Energy resilience is critical to Army Readiness. The homeland is no longer a sanctuary.[1] The Army is modernizing its installations with energy solutions that are resilient, efficient, and affordable.

The U.S. Army Office of Energy Initiatives (OEI) and Fort Huachuca collaborated with Tucson Electric Power (TEP) to develop an 18 megawatt (MW) alternating current (AC)[2] solar energy project at Fort Huachuca, AZ. The project's Phase I became commercially operational in January 2015, and Phase II became commercially operational in January 2017. This project provides supply diversity and sustainable onsite generation.

About Fort Huachuca

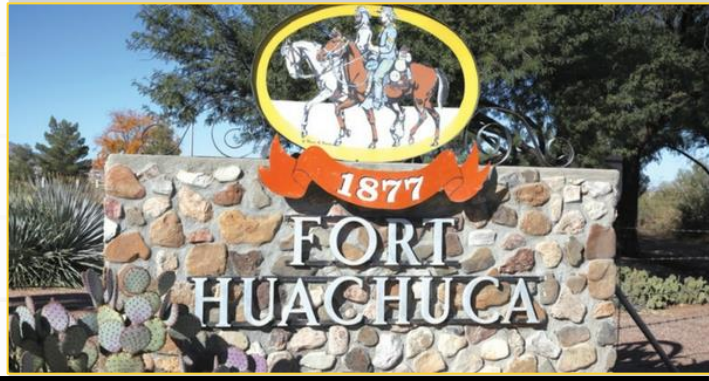
Fort Huachuca is a vital national asset supporting joint and interagency teams with critical aviation, intelligence, signal, and cyber enablers. Located near joint strike capabilities, Fort Huachuca is strategically positioned to support complex mission command operations and exercises.

Fort Huachuca in Sierra Vista, Arizona is 15 miles from the U.S.-Mexico border. The installation covers 100,539 acres, 964 square miles of restricted airspace, and 2,575 square miles of electronic ranges. Fort Huachuca also includes over 5.5 million square feet of operational facilities, over 1,000 family housing units, 3 remote airstrips, and 3 schools. Libby Army Airfield's 12,001-foot runway is the centerpiece of the Army's 6th busiest continental U.S. airfield.

Fort Huachuca is home to the U.S. Army Intelligence Center of Excellence, Network Enterprise Technology Command, Electronic Proving Ground, Joint Interoperability Test Command, Communications Electronics Command, and Information Systems Engineering Command. The installation supports over 50 one-of-a-kind tenants and missions with national-level requirements, including unmanned aircraft systems, training, military intelligence, and cybersecurity.

Project Details

- This project generates about 25 percent of the installation's energy needs annually.
- The power system offsets more than 58,000 tons of carbon dioxide per year.
- As the utility provider, TEP streamlined the interconnection process through its Fort Huachuca substation, thereby reducing interconnection costs and improving system reliability and energy resilience.
- The project is located on approximately 68 acres of land in the Fort Huachuca cantonment area.
- The Army and TEP signed a 30-year easement to facilitate the project.
- TEP contracted with industry partner E.ON for the system's design, engineering, procurement, and construction management.
- TEP financed, owns, operates, and maintains the large-scale solar energy project.
- Fort Huachuca continues to procure power from TEP through an existing General Services Administration (GSA) Areawide contract.
- An estimated 150 workers were employed during the construction of the solar array.



U.S.ARMY

About Army Office of Energy Initiatives

The Army OEI seeks to assist Army installations in optimizing operations, meeting mission essential requirements, mitigating vulnerabilities, and sustaining critical capabilities during any energy disruption. The Army OEI is aligned under the Assistant Secretary of the Army for Installations, Energy and Environment and the Deputy Assistant Secretary of the Army for Energy and Sustainability. The Army OEI serves as the Army's central program management office for the development, implementation, and oversight of privately financed, large-scale, energy projects focused on enhancing energy resilience, energy security, and sustainability on Army installations. Army OEI collaborates with industry, public utilities, and other stakeholders to implement projects using alternate resourcing strategies that provide energy generation, storage, and control capabilities. These "islandable" capabilities can support critical operations in the event of a grid outage, enabling the Army to achieve the levels of mobility and lethality to maintain its tactical and strategic edge. For more information about Army OEI, visit: www.oei.army.mil.

About Mission and Installation Contracting Command

Headquartered at Joint Base San Antonio-Fort Sam Houston, Texas, the Mission and Installation Contracting Command (MICC) is made up of more than 1,500 military and civilian members assigned to 3 contracting support brigades, 1 field directorate office, and 32 contracting offices throughout the continental United States and Puerto Rico. MICC supports Army Commands, installations, and activities with disciplined and responsive contracting solutions and oversight. It also, on order, aligns and provides contracting forces in order to enable Army Unified Land Operations.

About U.S. Army Corps of Engineers

The U.S. Army Corps of Engineers (USACE) has approximately 37,000 dedicated Civilians and Soldiers delivering engineering services to customers in more than 130 countries worldwide. USACE's mission is to deliver vital public and military engineering services; partnering in peace and war to strengthen our Nation's security, energize the economy and reduce risks from disasters, and with a vision of engineering solutions for our Nation's toughest challenges.

About Tucson Electric Power

Tucson Electric Power (TEP) provides safe, reliable power to 417,000 customers in the Tucson, Arizona metropolitan area. TEP has worked with customers to develop nearly 275 MW of solar generating capacity, enough to meet the annual electric needs of 58,000 homes. This success has earned TEP repeated recognition among the Solar Electric Power Association (SEPA) Top 10 Utility Solar Rankings, as well as the honor of being named SEPA's 2012 Investor Owned Utility of the Year. TEP and its parent company, UNS Energy Corporation, are subsidiaries of Fortis, which owns utilities that serve more than 3 million customers across Canada, the United States, and the Caribbean.

About E.ON

E.ON contracted with TEP to develop this large-scale energy project. E.ON's diversified business consists of renewables, conventional, and decentralized power generation, natural gas, energy trading, and retail and distribution. With its broad energy mix, E.ON owns almost 68 gigawatts of generation capacity and is one of the world's leading renewables companies.

Fort Huachuca, AZ, 18 MW solar array; 103,900 solar panels

[1] 2018 National Defense Strategy

[2] Alternating Current (AC) is provided to consumers. Inverters convert the direct current (DC) from solar panels to AC and losses occur during conversion.